abcam

Product datasheet

Anti-Cleaved PARP1 antibody [E51] - BSA and Azide free ab203467





RabMAb

2 References 6 图像

概述

产品名称 Anti-Cleaved PARP1抗体[E51] - BSA and Azide free

宿主 Rabbit

特异性 This antibody is specific for the p25 cleaved form of human PARP1.

适用于: WB, IHC-P

不适用于: ICC/IF

种属反应性 与反应: Mouse, Rat, Human

预测可用于: Chinese hamster

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免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Jurkat whole cell lysate (**ab7899**). HeLa and RAW 264.7 whole cell lysate. HAP1, HeLa,

NIH/3T3 and PC-12 treated with 1uM Staurosporine. Jukat cells treated with camptothecin. Jukat cells treated with 15-Acetoxyscirpenol. IHC-P: Rat colon tissue. Human ovarian cancer and breast

carcinoma tissue.

常规说明 ab203467 is the carrier-free version of **ab32064**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity

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- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C. Do Not Freeze.

存储溶液 pH: 7.20

Constituent: PBS

无载体 是

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 E51

 同种型
 IqG

应用

The Abpromise guarantee

Abpromise™承诺保证使用ab203467于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use at an assay dependent concentration. Predicted molecular weight: 25 kDa.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

应用说明 Is unsuitable for ICC/IF.

靶标

功能

Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and negatively regulates the transcription of MTUS2/TIP150. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Required for PARP9 and DTX3L recruitment to DNA damage sites. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment

of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites.

序列相似性 Contains 1 BRCT domain.

Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain. Contains 2 PARP-type zinc fingers.

翻译后修饰 Phosphorylated by PRKDC and TXK.

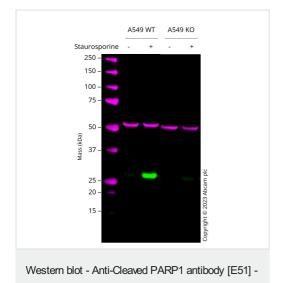
Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to

DNA damage sites.

S-nitrosylated, leading to inhibit transcription regulation activity.

细胞定位 Nucleus. Nucleus, nucleolus. Localizes at sites of DNA damage.

图片



BSA and Azide free (ab203467)

All lanes : Anti-Cleaved PARP1 antibody [E51] (<u>ab32064</u>) at 1/10000 dilution

Lane 1 : Wild-type A549 control staurosporine (0 uM, 72 h) cell lysate

Lane 2: Wild-type A549 treated staurosporine (3 uM, 24 h) cell lysate

Lane 3 : Wild-type A549 control staurosporine (3 uM, 72 h) cell lysate

Lane 4: PARP1 knockout A549 treated staurosporine (3 uM, 24 h) cell lysate

Lysates/proteins at 20 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

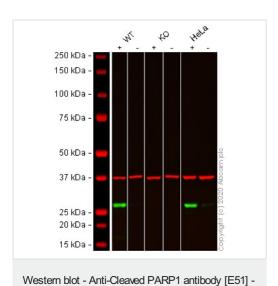
Predicted band size: 25 kDa Observed band size: 27 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab32064</u>).

Western blot: Anti-PARP1 antibody [E51] (<u>ab32064</u>) staining at 1/10000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] (<u>ab7291</u>) loading control staining at 1/20000 dilution, shown in magenta. In Western blot, <u>ab32064</u> was shown to bind specifically to PARP1. A band was observed at 27 kDa in wild-type A549 cell lysates with no signal observed at this size in PARP1 knockout cell

line. To generate this image, wild-type and PARP1 knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane.

Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit lgG H&L 800CW and Goat anti-Mouse lgG H&L 680RD at 1/20000 dilution.



BSA and Azide free (ab203467)

All lanes : Anti-Cleaved PARP1 antibody [E51] (**ab32064**) at 1/10000 dilution

Lane 1: Wild-type (1uM Staurosporine for 3hrs) HAP1 cell lysate

Lane 2: Wild-type (Staurosporine control) HAP1 cell lysate

Lane 3: PARP1 knockout (1uM Staurosporine for 3hrs) HAP1 cell lysate

Lane 4: PARP1 knockout (Staurosporine control) HAP1 cell lysate

Lane 5: HeLa (1uM Staurosporine for 3hrs) cell lysate

Lane 6: HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

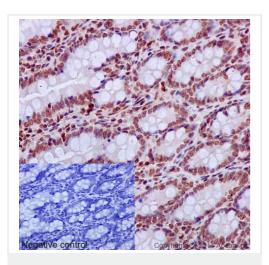
Predicted band size: 25 kDa
Observed band size: 27 kDa

This data was developed using the same antibody clone in a different buffer formulation (<u>ab32064</u>).

Lanes 1 - 6: Merged signal (red and green). Green - <u>ab32064</u> observed at 27 kDa. Red - loading control <u>ab8245</u> (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab32064 was shown to react with Cleaved PARP1 in wild-type HAP1 cells in Western blot with loss of signal observed in PARP1 knockout sample.Wild-type HAP1 and PARP1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab32064 and ab8245 (Mouse anti-GAPDH antibody [6C5]) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW)

preabsorbed (<u>ab216773</u>) and Goat anti-Mouse IgG H&L (IRDye[®] 680RD) preabsorbed (<u>ab216776</u>) secondary antibodies at 1 in 20000 dilution for 1 h at room temperature before imaging.

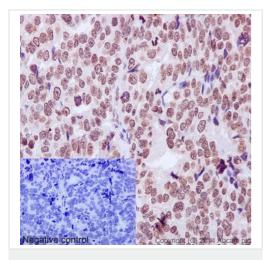


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cleaved PARP1 antibody [E51] - BSA and Azide free (ab203467)

Immunohistochemical staining of paraffin embedded rat colon with purified <u>ab32064</u> at a working dilution of 1/100. The secondary antibody used is a HRP polymer for rabbit lgG. The sample is counterstained with hematoxylin. Antigen retrieval was perfored using Tris-EDTA buffer, pH 9.0.

PBS was used instead of the primary antibody as the negative control (inset).

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32064).

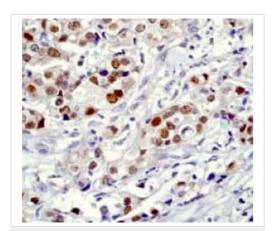


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cleaved PARP1 antibody [E51] - BSA and Azide free (ab203467)

Immunohistochemical staining of paraffin embedded human ovarian carcinoma with purified <u>ab32064</u> at a working dilution of 1 in 100. The secondary antibody used is a HRP polymer for rabbit lgG. Counterstained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0.

PBS was used instead of the primary antibody as the negative control (inset).

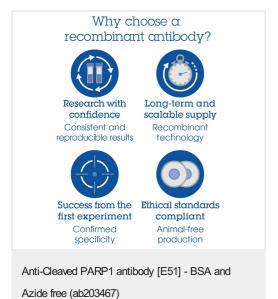
This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32064).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Cleaved PARP1 antibody [E51] - BSA and Azide free (ab203467)

Immunohistochemical staining of paraffin embedded human breast carcinoma tissue with unpurified <u>ab32064</u> at a 1/100 dilution.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32064).



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